AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original) Molecular complex between a tissue extract containing at least one known component and unknown components and a molecular vector comprising a particle bearing sugars and/or polypeptides, said molecular vector being able to recognize:

- said known component of said tissue extract, and
- a phagocytic receptor of monocyte derived cells,

with the proviso that said polypeptides are different from antibodies.

2. (original) Molecular complex according to claim 1, wherein the molecular vector comprises a particle bearing polypeptides and/or sugars such that:

- at least one of the said polypeptides and/or sugars recognizes said known surface component of the tissue extract,
- at least one of the said sugars and/or polypeptides recognizes phagocytic receptors of monocyte derived cells such as receptors for mannose or for oligosaccharides or Fe receptors of monocyte derived cells.

3. (original) Molecular complex according to claim 2, wherein the molecular vector comprises or is a particle of about 0,1 to about 2 µm of biocompatible polymer comprising

- surface polypeptides and/or sugars, preferably covalently linked to the surface of said particle, with said surface polypeptides and/or sugars recognizing said known component of the tissue extract, and

- mannolysated residues recognizing the mannose or oligosaccharide receptors of monocyte derived cells.

4. (previously presented) Molecular complex according to claim 1, wherein the tissue extract comprises macroscopic fragments or killed or irradiated or haptenized human or animal tumor cells such as lysates or apoptotic bodies, or killed pathogens, such as viruses or bacteria.

5. (original) Molecular complex according to claim 4, wherein the polypeptide of the particle recognises one known epitope of the tissue extract chosen among known tumor antigens such as (tumor peptide antigen) MelanA/MART-1, MAGE, BAGE, GAGE families; MUC, EGF-R, ERB-2, PSA, PSMA, HSP70, CEA, P53, RAS, Tyrosinase, gp100,….

6. (previously presented) Molecular complex according to claim 1, wherein the tissue extract comprises normal tissue parts such as tissue membranes, tissue factors, tissue proteins, macroscopic fragments of tissue such as lysates or apoptopic bodies, said tissue being originating from any part of human or

animal body or cellular extracts thereof, in particular from thymus, lung, pancreas, cartilage, endothelium, neuromuscular junctions, prostate, sexual organs, bladder, muscles, peripheral nerves, CNS extracts, spleen, liver, bone, heart, skin cells.

7. (original) Molecular complex according to claim 6, wherein the polypeptide and/or sugars of said particle forms high affinity binding with any component of said tissue extract.

8. (previously presented) Molecular complex according to claim 1, wherein the monocyte derived cells recognized by said molecular complex are macrophages, dendritic cells, or antigen presenting cells.

9. (previously presented) Monocyte derived cells such as prepared according to a process comprising the step of contacting monocyte derived cells with a molecular complex according to claim 1.

10. (previously presented) Monocyte derived cells such as prepared according to a process comprising contacting monocyte derived cells with a molecular complex according to claim 1, under conditions enabling phagocytosis of said molecular complex by said monocyte derived cells, intracellular degradation and processing of the known and unknown components of the tumor tissue extract and the presentation of said known and unknown components on the peripheral membrane of the monocyte derived cells together with MHC I and MHC II molecules.

11. (previously presented) Monocyte derived cells such as prepared according to a process comprising contacting monocyte derived cells with a molecular complex according to claim 1, under conditions enabling phagocytosis of such molecular complex by the monocyte derived cells.

12. (previously presented) *Ex vivo* method for stimulating cellular and/or humoral immune responses against unknown components of a tumor tissue extract comprising contacting monocyte derived cells with a molecular complex according to claim 1, under conditions enabling phagocytosis of said molecular complex by monocyte derived cells, intracellular degradation and processing of the known and of unknown components of the tumor tissue extract and the presentation of said known and unknown components on the peripheral membrane of the monocyte derived cells, together with MHC I and II molecules.

13. (currently amended) ~~Method~~ A method for treating cancer or inducing tissue repair, comprising [[of]] inducing *in vivo* specific cellular and/or humoral immune responses against unknown components of a tumor tissue extract ~~comprising injections of~~ in a subject by injecting said subject with a molecular complex according to claim 1~~, for instance by intramuscular, subcutaneous, local or intravenous route~~.

14. (currently amended) ~~Method~~ A method of inducing *in vivo* specific cellular and/or humoral responses against unknown components of a tumor tissue extract in a subject, comprising

sequential and/or simultaneous injections of monocyte derived cells presenting known and unknown components of said tumor tissue extract in said subject, together with MHC I and II molecules~~, as defined in claim 12~~, and ~~of molecular complexes~~ a molecular complex, and wherein said molecular complex is a molecular complex between a tissue extract containing at least one known component and unknown components and a molecular vector comprising a particle bearing sugars and/or polypeptides other than antibodies, said molecular vector being able to recognize:

- said known component of said tissue extract, and
- a phagocytic receptor of monocyte derived cells.

15. (previously presented) Method for conditioning *ex vivo* human monocytes derived cells, and preferentially macrophages, for them to acquire tissue specificity, comprising contacting monocyte derived cells with a molecular complex according to claim 1, under conditions enabling phagocytosis of such molecular complex by the monocyte derived cells.

16. (previously presented) Method of treatment of diseases involving accumulation of conditioned monocyte derived cells according to claim 15 in specific tissue to induce tissue repair and/or regeneration comprising:

- either simultaneous and/or sequential injections complex under conditions enabling phagocytosis,
- or injection of the monocyte derived cells which have previously phagocytosed a molecular complex.